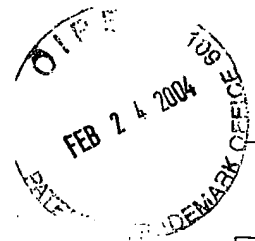


### **Abstract of the Disclosure**

The reach of R.F.Furchgottle and L.J.Ignarro which leads to the "NO theory" has shock the whole world. My invention is a combined patent including pharmacology as well as isolation and purification of Bombyx moriL. In my product, Bombyx moriL accounts for 56%, others 44%. We also adopt WLD resin absorption, other purification technology, and gas chromatography. The biological activity is ensured because all the process is at 85°C. My product has selective effect on cavernous body, increasing cGMP and NO by the inhibition in of PED<sub>5</sub> enzymes. The Doppler test for the maximum and average blood flow in cavernous body also further proved the conclusion of the pharmacological activity.



## Abstract of the Disclosure

(attached table 1)

1	Bombyx moriL Saturniidae	2	Rhizoma corydalis	3	Fructus Schisandae
	Antheraea Pernyi Gnerin-meneville (male adult)		Papaveraceae Corydalis Yanhuso W.T.Wang (dry stem tuber)		Magnoliaceae Schisandra Chinensis(Tuncz)Baill (fruit)
4	Herba Epimedii	5	Cortex Cinnamomi	6	Semen Trigonellae
	Berberidaceae Epimedium brevicoram Maxm (falling branches)		Lauraceae Cinnamomum Cassia Presl (dry hide)		Leguminosae Trigonella foenum-graecum (seed)
7	Semen Cuscutae	8	SemenAllii Tuberosi	9	Fructus Foeniculi
	Convolvulaceae(cuscutoidae) Cuscuta Chinensis Lam (fruit)		Liliaceae Allium tuberosum RottL. (seed)		Umbelliferae Foeniculum Vulgaremill (fruit)
10	Herba Cistanchis	11	Common Panaxoside-	12	Radix Achyranthis-
	Orobanchaceae Cistanche deserticola Y.C.Ma (succulent stem)		Ginseng Araliaceae Panax Ginseng C.A.Mey (dry root)		Bidentatae Amaranthaceae Achyranthes bidentata BL. (dry root)
13	Rhizoma Carculiginis	14	Fructus Cnidii		
	Amaryllidaceae Curculigo Orchioides Gaertn(root and stem)		Umbelliferae Cnidium Monnieri(L.)Cuss.(fruit)		

## Abstract of the Disclosure

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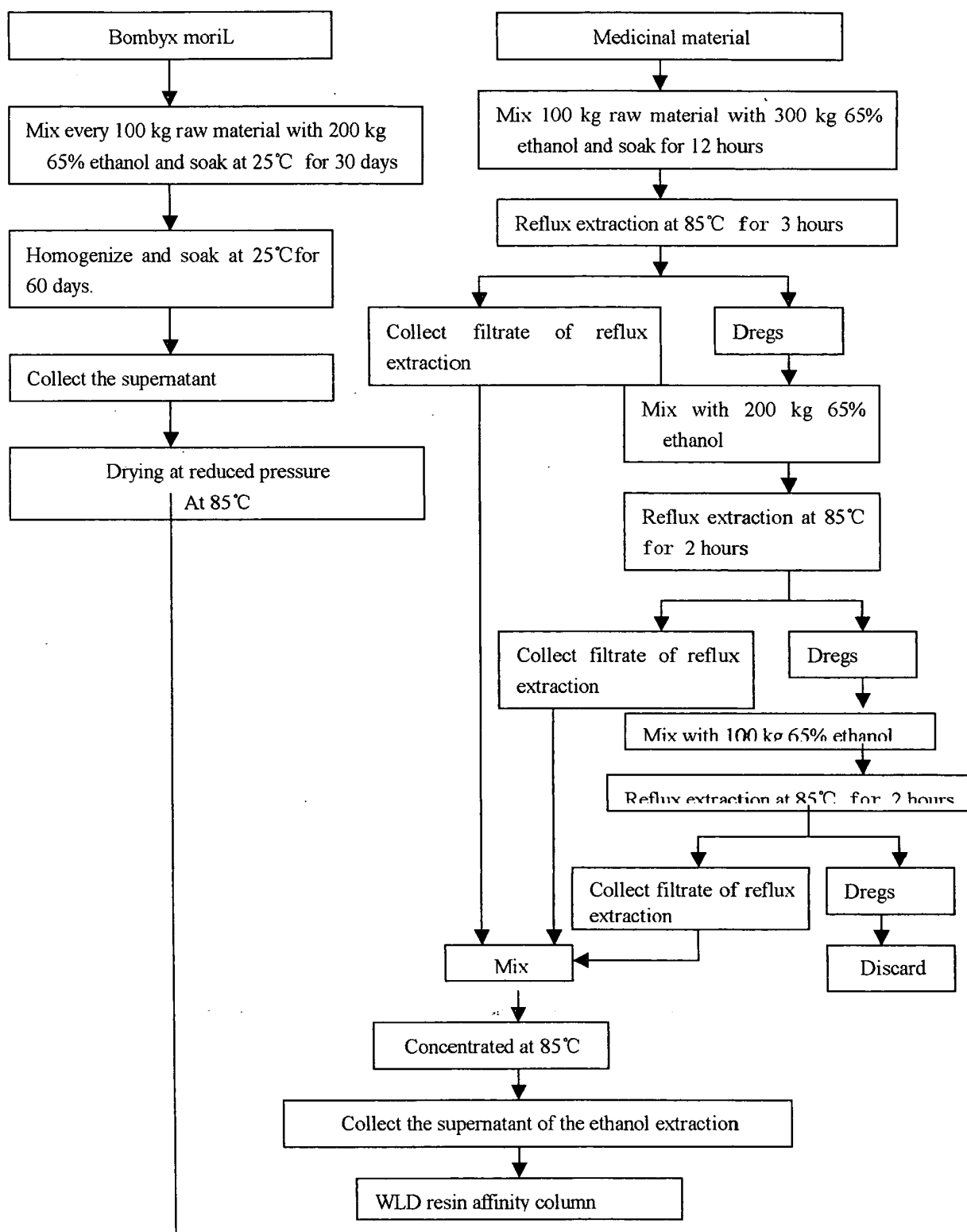
(attached table 2)

Total: 100%

1. Bombyx moriL	56%
2. Rhizoma Corydalis	6.5%
3. Fructus Schisandae	5.5%
4. Herba EpimeiL.	4.4%
5. Cortex Cinnamomi	2.2%
6. Tritonelliae Gyaesin	3.5%
7. Semen Cuscutae	2.0%
8. Semen Alii Tuberosi	2.2%
9. Fructus Foeniculi	1.1%
10. Herba Cistanchis	1.1%
11. Common Panaxoside Ginseng	6.5%
12. Radix Achyranthis Bidentatae	4.4%
13. Rhizoma Curculiginis	3.5%
14. Fructus cnidii	1.1%

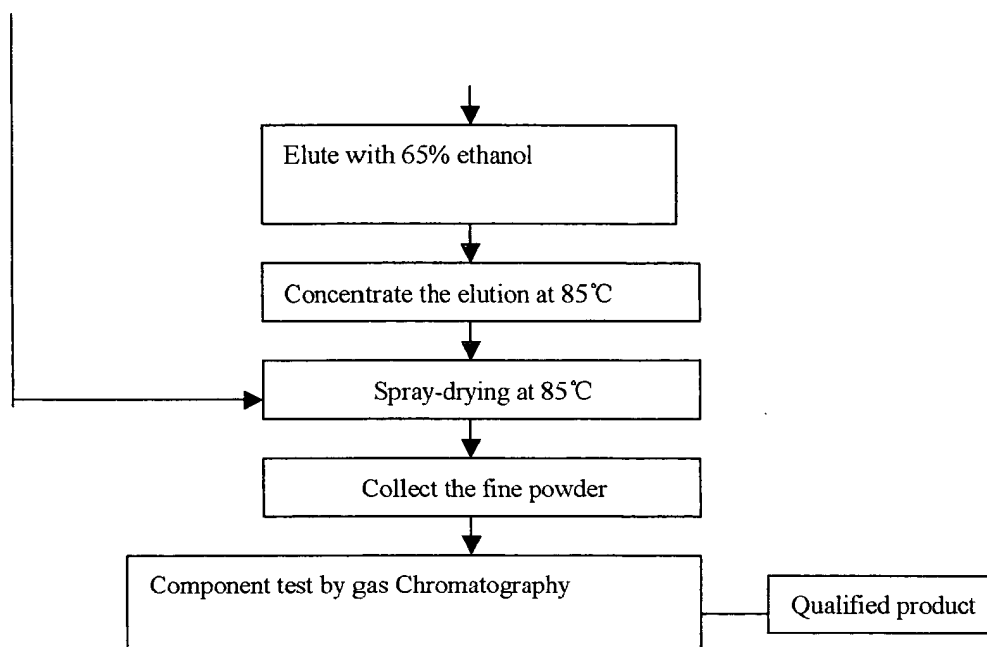
## Abstract of the Disclosure

(attached table 3)



## Abstract of the Disclosure

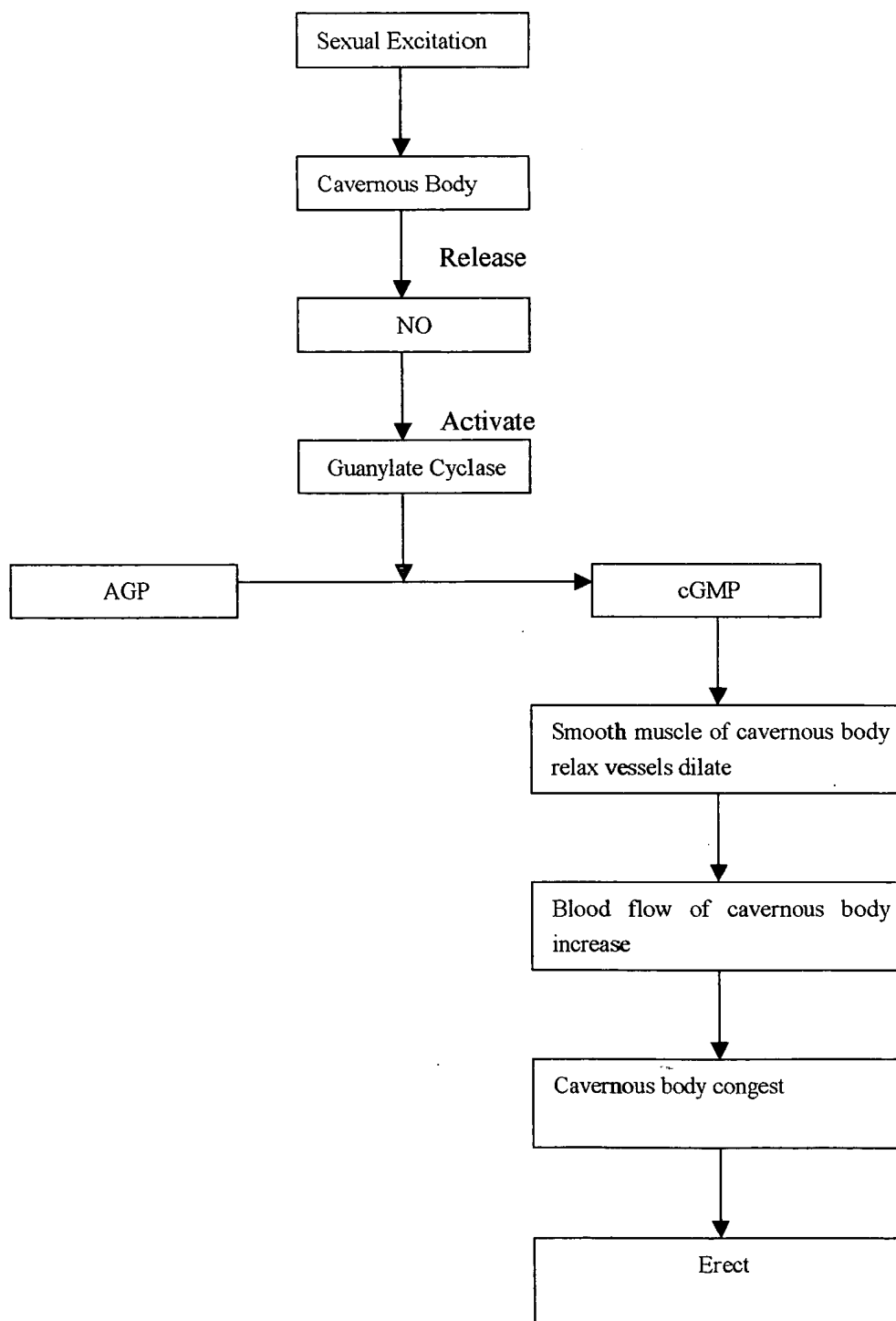
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## Abstract of the Disclosure

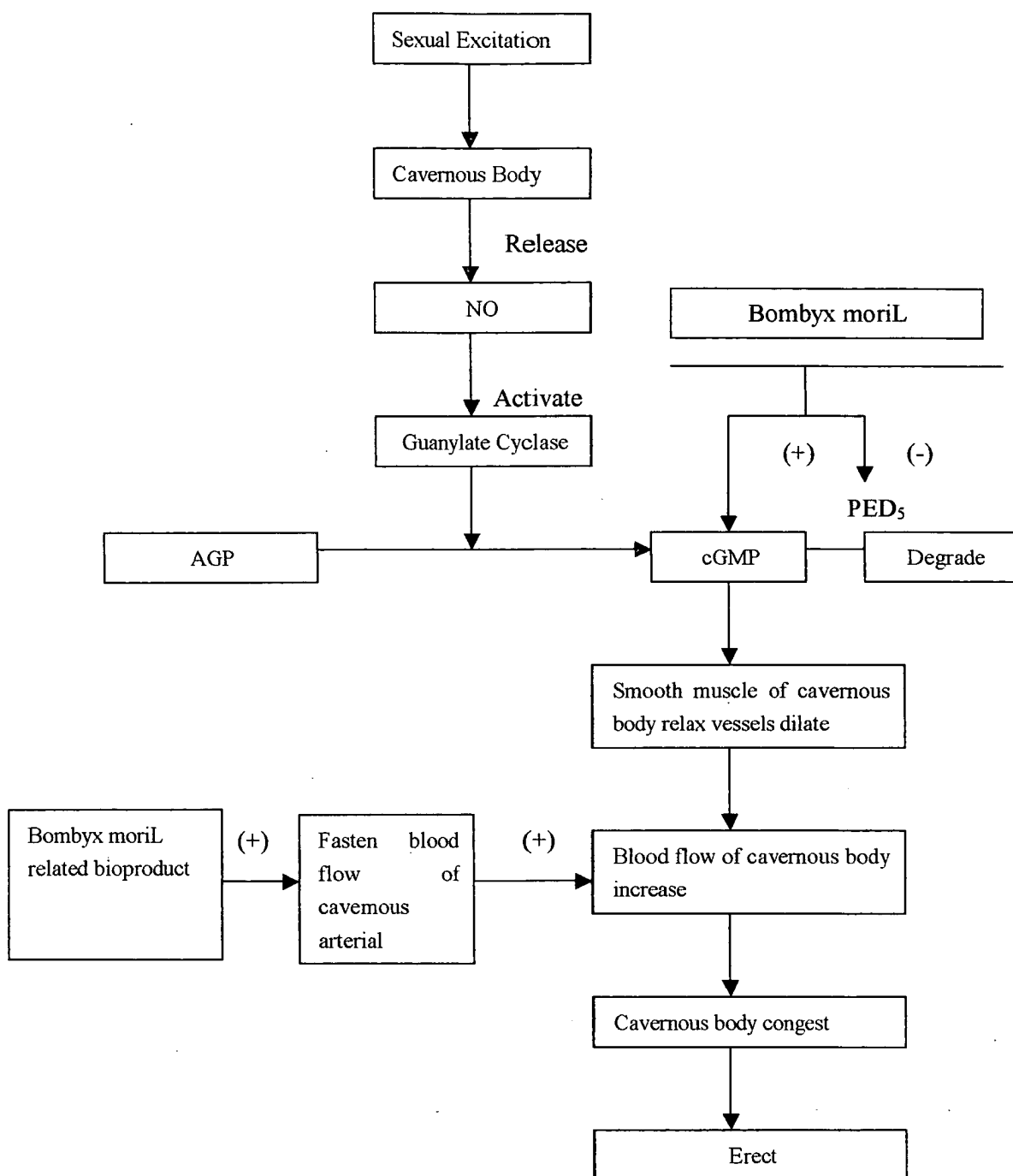
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(attached table 4)



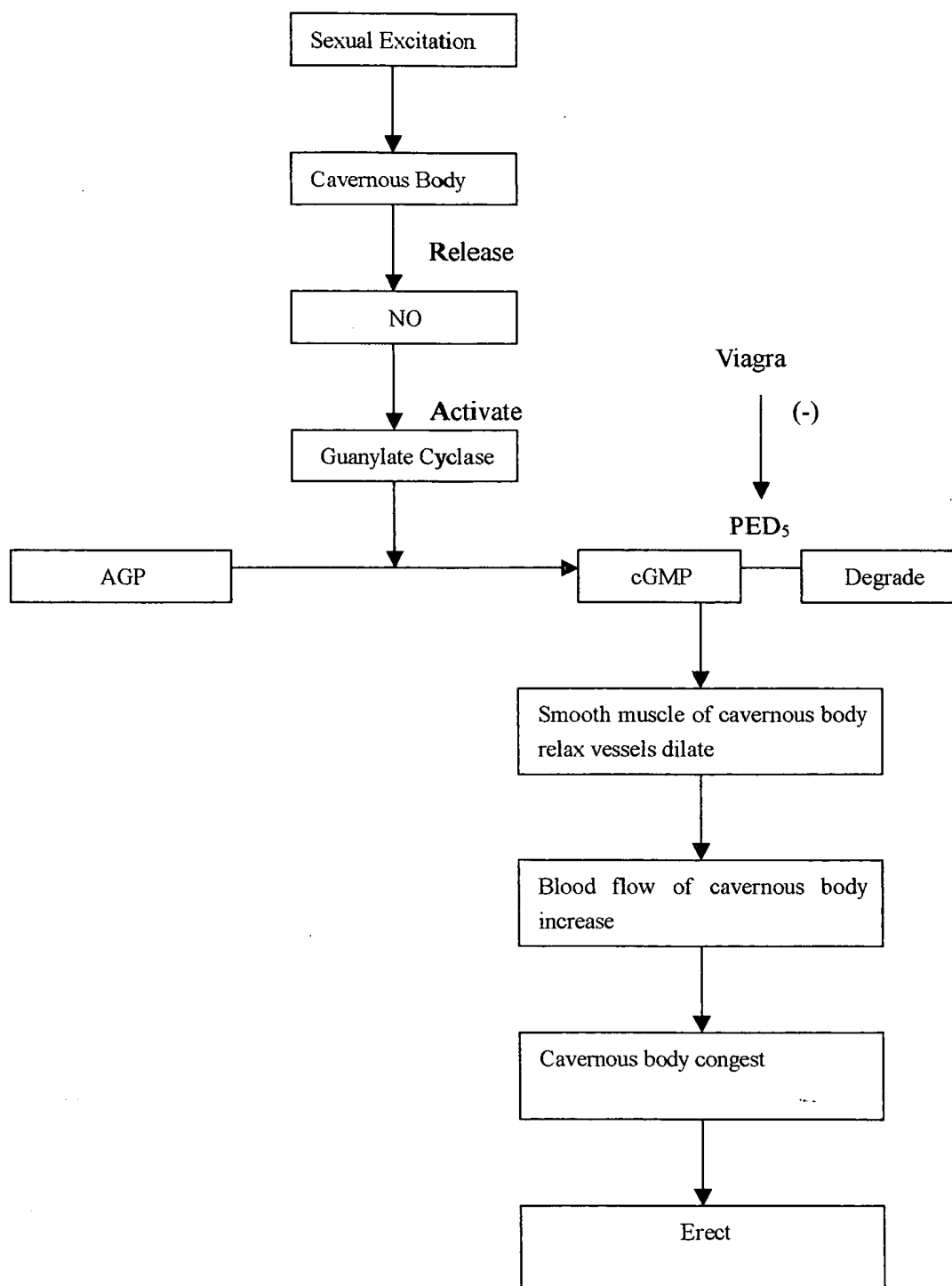
## Abstract of the Disclosure

(attached table 5)



## Abstract of the Disclosure

(attached table 6)





## Abstract of the Disclosure

(attached table 7)

Group	Number of Animal (n)	Mobility of 1st. band $X \pm SD$	Mobility of 2nd band $X \pm SD$
Blank Comparison (Normal Saline)	10	$0.21 \pm 0.01$	$0.21 \pm 0.01$
Viagra 6mg/kg	10	$0.21 \pm 0.01$	$0.1 \pm 0.05$
Viagra 12mg/kg	10	$0.21 \pm 0.01$	$0.08 \pm 0.02$
Product mainly consisting of bombyx moriL 200mg/kg	10	$0.23 \pm 0.01$	$0.09 \pm 0.01$
Product mainly consisting of bombyx moriL 400mg/kg	10	$0.22 \pm 0.01$	$0.08 \pm 0.01$

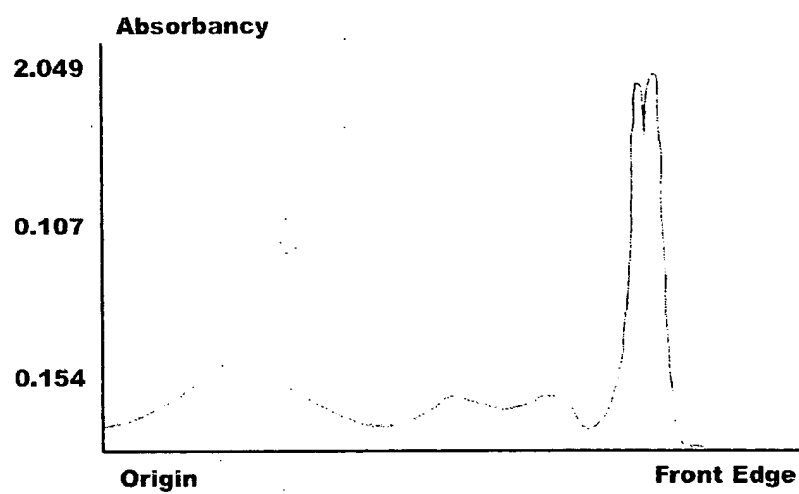
(attached table 8)

Group	Number of Animal (n)	Peak Area $X \pm SD$	P Value
Blank Comparison (Normal Saline)	10	$0.495 \pm 0.328$	
Viagra 6mg/kg	10	$0.249 \pm 0.126$	$P < 0.05$
Viagra 12mg/kg	10	$0.198 \pm 0.092$	$P < 0.05$
Product mainly consisting of bombyx moriL 200mg/kg	10	$0.306 \pm 0.168$	
Product mainly consisting of bombyx moriL 400mg/kg	10	$0.215 \pm 0.521$	$P < 0.05$

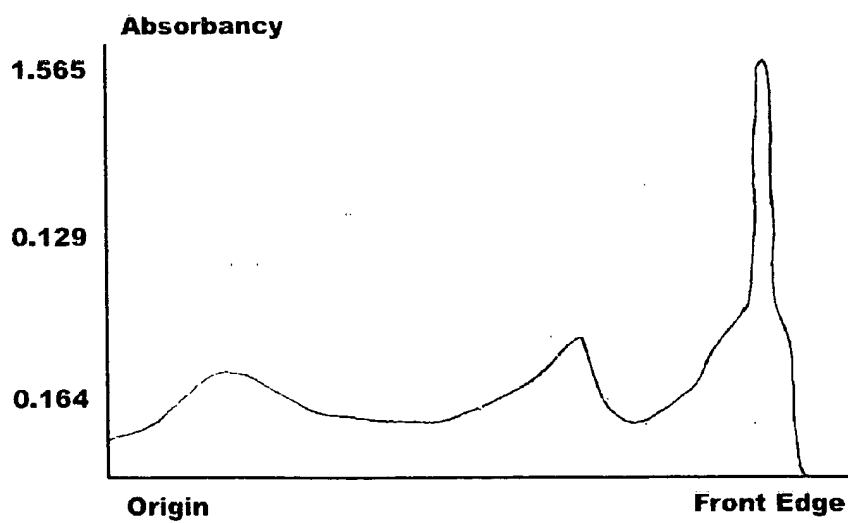
## Abstract of the Disclosure

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(attached table 9)



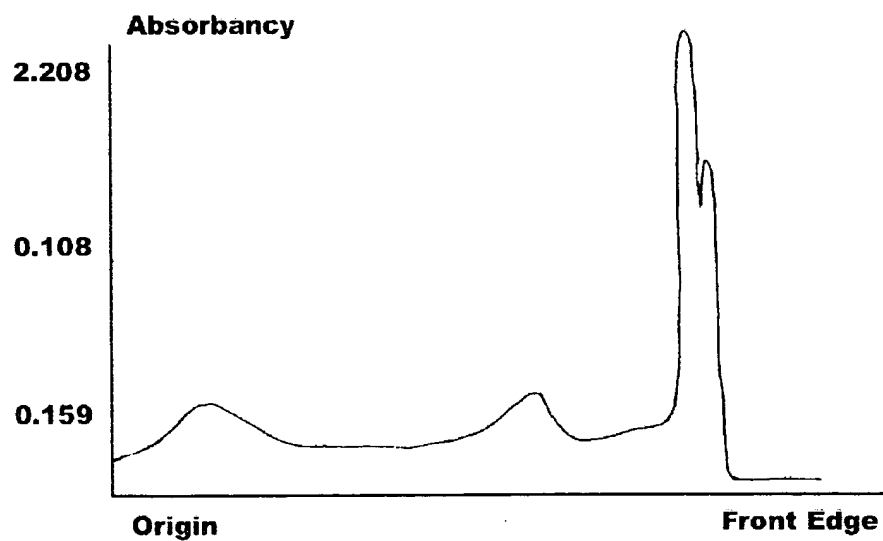
(attached table 10)



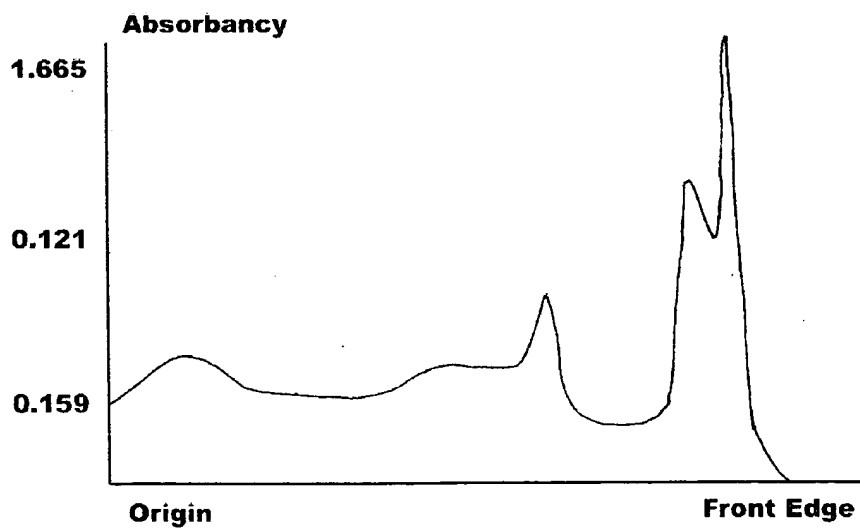
## Abstract of the Disclosure

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(attached table 11)

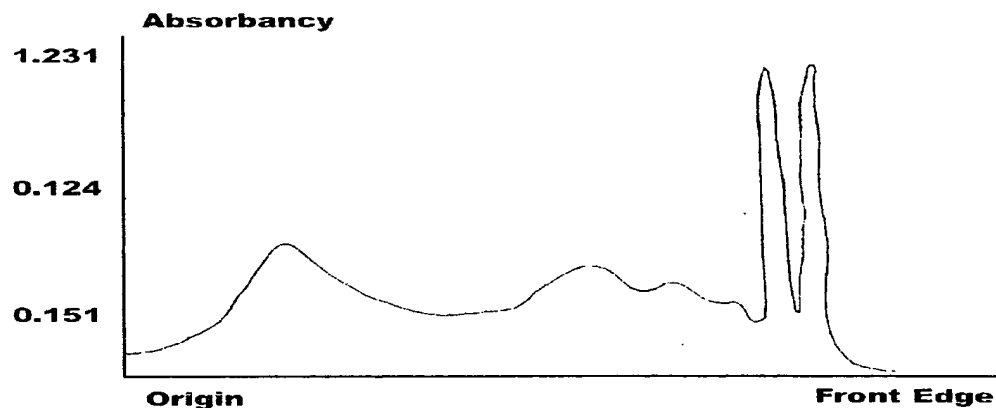


(attached table 12)



## Abstract of the Disclosure

(attached table 13)



(attached table 14)

Group	Number of Animals	Pmol/ml X±SD	P	Remarks
Control Group(NS)	10	2.59±0.48		
Viagra Group 6mg/kg	10	4.53±0.67	P<0.001*	Contrast with control group
Viagra Group 12mg/kg	10	4.42±0.97	P<0.001	Contrast with control group
Product mainly consisting of bombyx moriL Group200mg/kg	10	3.88±1.01	P<0.01*	Contrast with control group
Product mainly consisting of bombyx moriL Group 400mg/kg	10	2.80±0.18	p>0.2	Contrast with control group

\*Very significant difference

\*\*Significant difference

## Abstract of the Disclosure

(attached table 15)

Group	Number of Animals	Pmol/ml $\bar{X} \pm SD$	P	Remarks
Control Group (NS)	10	0.25 $\pm$ 0.05		
Viagra Group 6mg/kg	10	0.40 $\pm$ 0.26	P<0.1	Contrast with control group
Viagra Group 12mg/kg	10	0.53 $\pm$ 0.12	P<0.001	Contrast with control group
Product mainly consisting of bombyx moriL Group 200mg/kg	10	0.45 $\pm$ 0.17	P<0.01	Contrast with control group
Product mainly consisting of bombyx moriL Group 400mg /kg	10	0.43 $\pm$ 0.13	P<0.001	Contrast with control group

(attached table 16)

Groups	Dosage (mg/kg)	Anima value <sup>*</sup> Numbers	NO contents $\bar{X} \pm SD$ umol/L	P
Negative control	0.5 ml of the physical saline solution	10	29.2 $\pm$ 5.37	
Viagra low	6	10	44.88 $\pm$ 9.47	P<0.01
Viagra high	12	10	48.52 $\pm$ 17.95	P<0.05
Product mainly consisting of bombyx moriL low	200	10	41.98 $\pm$ 16.11	P<0.05
Product mainly consisting of bombyx moriL high	400	10	42.36 $\pm$ 13.04	P<0.05

\*NOTE: When compared the NO contents of tested drug groups with the control groups.

## Abstract of the Disclosure

(attached table 17)

Group	Case Number n	Dosage mg	Blood flow rate (cm/s, X±SD)					
			MAX			MIN		
			Before administration	1h after administration	2h after administration	Before administration	1h after administration	2h after administration
Product mainly consisting of bombyx moriL	11	800	9.18±2.27	+4.64±2.25***	+2.0±2.19*	1.09±0.70	+0.36±0.67	+0.36±1.03
Product mainly consisting of bombyx moriL	12	1600	9.25±1.42	+6.75±4.0***	+3.33±2.71*	1.17±0.58	+0.17±0.39	+0.25±0.62
Viagra	11	25	9.55±2.58	+4.36±2.98***	+2.45±3.78*	1.09±0.30	+0.27±1.01	+0.36±0.81
Viagra	12	50	9.58±1.08	+5.67±4.31***	+1.75±2.63*	1.25±0.62	+0.17±0.72	+0.17±0.91

Group	Case Number n	Dosage mg	Blood flow rate (cm/s, X±SD)					
			TAMX			PI, X±SD		
			Before administration	1h after administration	2h after administration	Before administration	1h after administration	2h after administration
Product mainly consisting of bombyx moriL	11	800	2.45±1.29	+1.09±0.94**	+0.18±0.98	3.47±1.27	+0.24±1.24	+0.32±1.71
Product mainly consisting of bombyx moriL	12	1600	2.50±0.67	+1.17±0.83***	+0.42±1.31	3.43±0.74	+0.87±0.63***	+0.45±1.43
Viagra	11	25	2.64±1.12	+1.36±1.43*	0.18±1.17	3.24±1.02	-0.19±1.16	+0.10±0.85
Viagra	12	50	2.67±0.78	+1.43±1.27**	0.50±0.80	3.37±0.79	+0.24±0.84	-0.33±0.72

Contrasted with amount before administration, \*P<0.05, \*\*P<0.01, \*\*\*P<0.001, "+", "-" as increasement or decrease ment

(attached table 18)

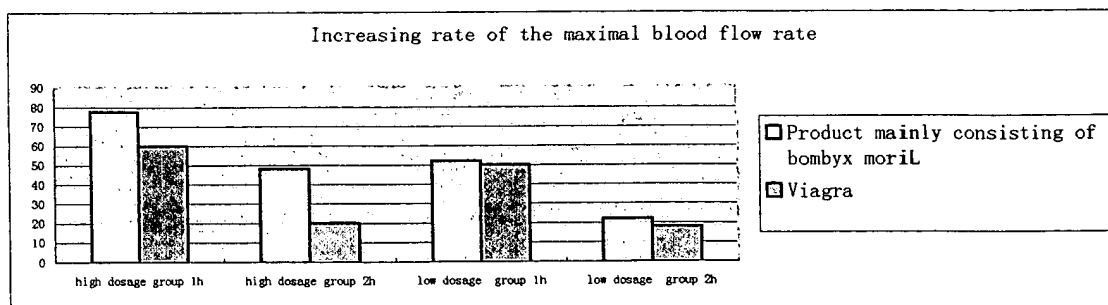


Chart 1 the influence of product mainly consisting of bombyx moriL and viagra on the cavernous arterial maximal blood flow rate of normal females

## Abstract of the Disclosure

(attached table 19)

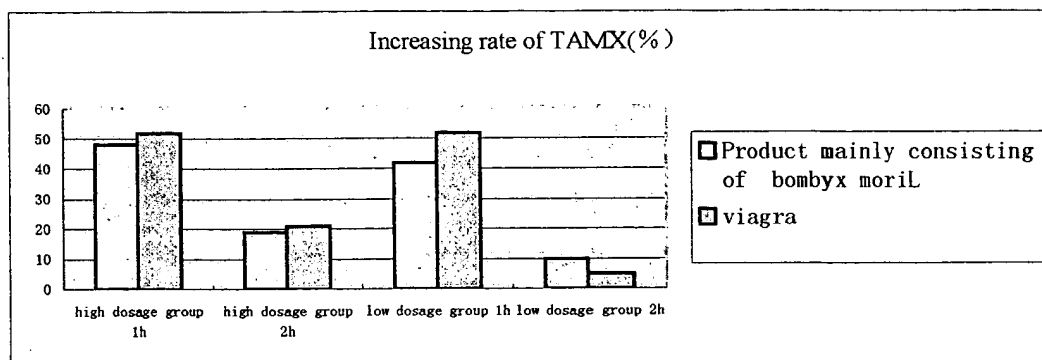
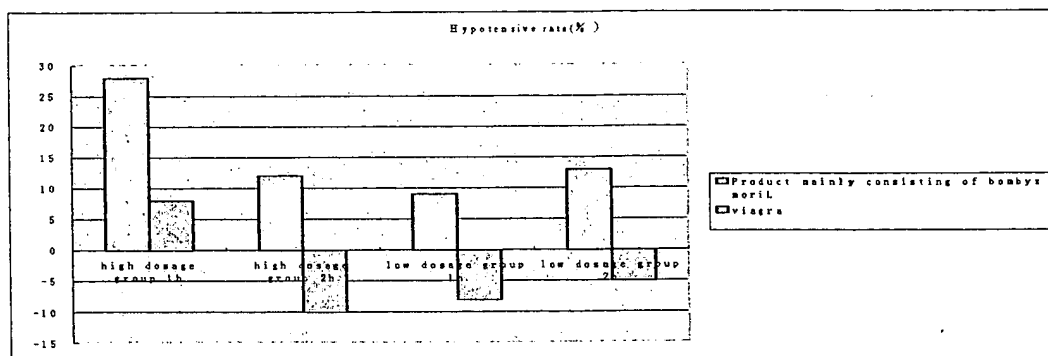


Chart 2 the influence of product mainly consisting of bombyx moriL and viagra on the cavernous arterial average blood flow rate of normal males

(attached table 20)

Chart3 the influence of Product mainly consisting of bombyx moriL and viagra on the cavernous arterial pulsation index



## Abstract of the Disclosure

(attached table 21)

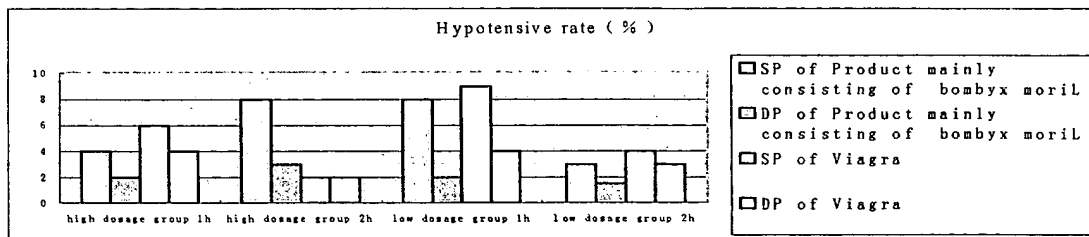


Chart 4 the influence of product mainly consisting of bombyx moriL and viagra on the blood pressure

(attached table 22)

Group	Dosage mg	Case number	Blood Pressure (mmHg, $\bar{X} \pm SD$ )					
			Systolic Pressure			Diastolic Pressure		
			Before administration	1h after administration	2h after administration	Before administration	1h after administration	2h after administration
Product mainly consisting of bombyx moriL	800	11	118.6 $\pm$ 5.9	-9.1 $\pm$ 6.6**	+3.2 $\pm$ 6.0	81.4 $\pm$ 6.0	-1.8 $\pm$ 5.6	-1.4 $\pm$ 4.5
Product mainly consisting of bombyx moriL	1600	12	120.0 $\pm$ 9.4	-5.5 $\pm$ 6.0*	+9.5 $\pm$ 9.3**	78.5 $\pm$ 10.5	-2.0 $\pm$ 6.8	-2.5 $\pm$ 6.3
Viagra	25	11	120.5 $\pm$ 10.6	-10.0 $\pm$ 6.3**	-3.5 $\pm$ 6.2	81.8 $\pm$ 6.4	-2.7 $\pm$ 4.7	-1.8 $\pm$ 4.6
Viagra	50	12	117.7 $\pm$ 9.8	-7.3 $\pm$ 6.1**	-2.7 $\pm$ 5.6	78.6 $\pm$ 10.7	-3.4 $\pm$ 7.2	-2.0 $\pm$ 6.4

Contrasting with that before administration, \*P<0.05、\*\*P<0.01、\*\*\*P<0.001；“+、



## **Abstract of the Disclosure**

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-”expressed as increasement or decreasement.